

**NEW SOURCE CONSTRUCTION PERMIT  
and MINOR SOURCE OPERATING PERMIT  
OFFICE OF AIR MANAGEMENT**

**Cabinets by Graber, Inc.  
15202 Grabill Road  
Grabill, IN 46741**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 003-11152-00304	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary wooden cabinet surface coating and composite countertop manufacturing operation.

Authorized Individual: Chris Graber  
Source Address: 15202 Grabill Road, Grabill, IN 46741  
Mailing Address: P.O. Box 539, Grabill, IN 46741  
Phone Number: 219-625-2243  
SIC Code: 2434  
County Location: Allen  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD Rules

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) Three (3) paint booths, identified as P1, P2 and P3, utilizing airless spray guns to coat a maximum of 2.79 wood units per hour, utilizing dry filters for particulate control, exhausting from paint booths P1 and P2 to stack P1 and exhausting from paint booth P3 to stack P2;
- (b) one (1) countertop manufacturing operation, consisting of the following:
  - (1) six (6) forming tables for pouring resins;
  - (2) sanding and trimming area, utilizing an air purifier for particulate control.
- (c) Three (3) No. 1 distillate oil fueled heaters, identified as H1, H2, and H3, each rated at 0.125 million British thermal units (MMBtu) per hour, each exhausting at one (1) stack, identified as H1, H2, and H3, respectively;
- (d) One (1) No. 1 distillate oil fueled dryer, identified as D4, rated at 0.165 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as D4; and
- (e) Miscellaneous saws/sanders/wood trimming equipment, with a maximum capacity of 100 pounds per hour off wood, utilizing a baghouse and cyclone collection system for particulate control and exhausting to the interior of the building.

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### **B.1      Permit No Defense [IC 13]**

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This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

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Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)]**

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Modification to Permit [326 IAC 2]**

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All requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### **B.6      Minor Source Operating Permit [326 IAC 2-6.1]**

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This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a)      The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.
- (b)      If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c)      The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (d)      The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e)      Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at

least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 Minor Source Status [326 IAC 2-7] [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) The total source potential to emit of any individual hazardous air pollutant (HAP) is less than 10 tons per year, and the total source potential to emit of any combination of HAPs is less than 25 tons per year, therefore, the requirements of 326 IAC 2-7 (Part 70 Permit Program) will not apply.
- (c) Any change or modification which may increase potential to emit of any regulated pollutant to 100 tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAM prior to making the change.
- (d) Any change or modification which may increase potential to emit of any individual HAP to 10 tons per year or any combination of HAPs to 25 tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAM prior to making the change.

### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and

approval by IDEM, OAM.

**C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]**

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- (a) The Permittee must comply with the requirements of [326 IAC 2-6.1-6] whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

**C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the



information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

- (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

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**C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]**  
Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

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**C.6 Permit Revocation [326 IAC 2-1-9]**

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

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**C.7 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen

(15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**Testing Requirements**

**C.9 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**Compliance Monitoring Requirements**

**C.10 Compliance Monitoring [326 IAC 2-1.1-11]**

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Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of

the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]**

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- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.12 Monitoring Methods [326 IAC 3]**

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Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

**C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]**

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- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

**C.14 Actions Related to Noncompliance Demonstrated by a Stack Test**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### **Record Keeping and Reporting Requirements**

#### **C.15 Malfunctions Report [326 IAC 1-6-2]**

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

#### **C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]**

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- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-Annual Compliance Monitoring Report. Any

deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions unit Description

- (a) Three (3) paint booths, identified as P1, P2 and P3, utilizing dry filters for particulate control, utilizing airless spray guns to coat a maximum of 2.79 wood units per hour, exhausting from paint booths P1 and P2 to stack P1 and exhausting from paint booth P3 to stack P2;
- (b) one (1) countertop manufacturing operation, consisting of the following:
  - (1) six (6) forming tables for pouring resins
  - (2) sanding and trimming area, utilizing an air purifier for particulate control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Any change or modification, from the one (1) composite countertop operation that would increase the potential VOC emissions to more than 25.0 tons per year, shall obtain approval from the Office of Air Management (OAM), as required by 326 IAC 2-1.1 before such change can occur.

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the three (3) paint booths, identified as P1, P2 and P3 shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the three (3) paint booths, identified as P1, P2 and P3 shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

#### D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the three (3) paint booths, identified as P1, P2 and P3 and any control



devices.

### **Compliance Determination Requirements**

#### **D.1.5 Testing Requirements [326 IAC 2-1.1-11]**

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The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### **D.1.6 Particulate Matter (PM)**

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The dry filters for PM control shall be in operation at all times when the three (3) paint booths, identified as P1, P2 and P3 are in operation.

### **Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### **D.1.7 Monitoring**

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- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks P1 and P2 while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

### **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

#### **D.1.8 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions unit Description

- (c) Three (3) No. 1 distillate oil fueled heaters, identified as H1, H2, and H3, each rated at 0.125 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as H1, H2, and H3.
- (d) One (1) No. 1 distillate oil fueled dryer, identified as D4, rated at 0.165 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as D4.
- (e) Miscellaneous saws/sanders/wood trimming equipment, utilizing a collection system for particulate control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards

### D.2.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the miscellaneous saws/sanders/wood trimming equipment shall not exceed 0.55 pounds per hour when operating at a process weight rate of 100 pounds per hour.

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

## Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]

### D.2.2 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## **MALFUNCTION REPORT**

### **INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ? \_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ? \_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES? \_\_\_\_\_, 25 TONS/YEAR VOC ? \_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ? \_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ? \_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ? \_\_\_\_\_, 25 TONS/YEAR FLUORIDES ? \_\_\_\_\_, 100TONS/YEAR CARBON MONOXIDE ? \_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ? \_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ? \_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ? \_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ? \_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?      Y      N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?      Y      N

COMPANY: Cabinets by Graber, Inc. PHONE NO. ( 219 ) 627-2243  
LOCATION: (CITY AND COUNTY) Grabill, IN Allen County  
PERMIT NO. 003-11152 AFS PLANT ID: 003-11152 AFS POINT ID: \_\_\_\_\_ INSP: Jennifer Schick  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/19\_\_\_\_ \_\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/19\_\_\_\_ \_\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_  
INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

PAGE 1 OF 2

**Please note - This form should only be used to report malfunctions**

**applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for a New Source Construction and Minor Source Operating Permit

Source Name: Cabinets by Graber, Inc.  
Source Location: 15202 Grabill Road, Grabill, IN 46741  
County: Allen  
Operation Permit No.: MSOP003-11152-00304  
SIC Code: 2434  
Permit Reviewer: Phillip Ritz/EVP

On August 25, 1999, the Office of Air Management (OAM) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that Cabinets by Graber, Inc. had applied for a construction permit to construct and operate a wooden cabinet surface coating and composite countertop manufacturing operation. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 2, 1999, Mark Sanders of Barnes Consulting Services, LLC, on behalf of Cabinets by Graber, Inc., submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

#### Comment 1

The booths identified as PB1 and PB2 have a commons stack identified as P1. Please correct all references to these booths.

#### Comment 2

Another booth identified as PB3 using stack P2 will be added to meet quality requirements of the customer. This will not increase the units per hour or the usage figures. Please spread the materials usage shown for PB1 and PB2 across all three booths PB1, PB2 and PB3.

#### Response 1 and 2

The requested changes will not affect the sources potential to emit, as the maximum throughput consists of the combined maximum throughput of all three paint booths. Therefore, the changes to the permit are as follows:

- (a) Section A.2 of the permit has been revised to list the correct number of paint booths and their respective stacks:
  - (a) ~~Two (2)~~ **Three (3)** paint booths, identified as P1, ~~and P2 and P3~~, utilizing airless spray guns to coat a maximum of 2.79 wood units per hour, **utilizing** dry filters for particulate control, ~~and exhausting from paint booths P1 and P2 to stacks P1 and exhausting from paint booth P3 to stack P2;~~
- (b) The Emissions unit Description of Section D.1 of the permit has been revised to list the

correct number of paint booths and their respective stacks:

- (a) ~~Two (2)~~ **Three (3)** paint booths, identified as P1, ~~and P2 and P3~~, utilizing dry filters for particulate control, **utilizing** airless spray guns to coat a maximum of **2.79 wood units per hour, exhausting from paint booths P1 and P2 to stack P1 and exhausting from paint booth P3 to stack P2;**
- (c) Condition D.1.2, Volatile Organic Compounds (VOC) [326 IAC 8-2-12], of the permit has been revised to list the correct number of paint booths:  
  
Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the ~~two (2)~~ **three (3)** paint booths, identified as P1, ~~and P2 and P3~~ shall utilize one of the following application methods:
- (d) Condition D.1.3 of the permit has been revised to list the correct number of paint booths:  
  
Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the ~~two (2)~~ **three (3)** paint booths, identified as P1, ~~and P2 and P3~~ shall be limited by the following:
- (e) Condition D.1.4 of the permit has been revised to list the correct number of paint booths and their respective stacks:  
  
A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the ~~two (2)~~ **three (3)** paint booths, identified as P1, ~~and P2 and P3~~ and any control devices.
- (f) Condition D.1.6 of the permit has been revised to list the correct number of paint booths:  
  
The dry filters for PM control shall be in operation at all times when the ~~two (2)~~ **three (3)** paint booths, identified as P1, ~~and P2 and P3~~ are in operation.

The following revisions have been made to the TSD (**bolded** language has been added, the language with a ~~line~~ through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

- (a) The following changes have been made to the Unpermitted Emission Units and Pollution Control Equipment, page 1 of 6 of the TSD:
  - (a) ~~Two (2)~~ **Three (3)** paint booths, identified as P1, ~~and P2 and P3~~, utilizing airless spray guns to coat a maximum of 2.79 wood units per hour, dry filters for particulate control, and exhausting **from paint booths P1 and P2 to stacks P1 and exhausting from paint booth P3 to stack P2;**

- (b) The following changes have been made to the **Stack Summary**, page 2 of 6 of the TSD

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
P1&2	P1 & P2 Paint Booths	25.00	2.00	3,900 (est.)	Ambient
<b>P2</b>	<b>P3 Paint Booth</b>	<b>25.00</b>	<b>2.00</b>	<b>3,900 (est.)</b>	<b>Ambient</b>
V1	V1 Process Vent	4.70	2.00	3,900 (est.)	Ambient
E1	E1 Diesel Generator	9.00	0.25	N/A	Ambient
H1	H1 Hot Air Heater	21.50	0.67	N/A	Ambient
H2	H2 Hot Air Heater	24.00	0.67	N/A	Ambient
H3	H3 Hot Air Heater	14.00	0.67	N/A	Ambient

- (c) The following changes have been made to **326 IAC 6-3-2 (Process Operations)**, page 5 of 6 of the TSD

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the:

- (a) — ~~two (2)~~ **three (3)** paint booths, identified as P1, ~~and P2 and P3~~ shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the ~~two (2)~~ **three (3)** paint booths, identified as P1, ~~and P2 and P3~~ are in operation, in order to comply with this limit.

**Indiana Department of Environmental Management  
Office of Air Management**

**Technical Support Document (TSD) for a New Source Construction and  
Minor Source Operating Permit**

**Source Background and Description**

<b>Source Name:</b>	<b>Cabinets by Graber, Inc.</b>
<b>Source Location:</b>	<b>15202 Grabill Road, Grabill, IN 46741</b>
<b>County:</b>	<b>Allen</b>
<b>SIC Code:</b>	<b>2434</b>
<b>Operation Permit No.:</b>	<b>MSOP003-11152-00304</b>
<b>Permit Reviewer:</b>	<b>Phillip Ritz/EVP</b>

The Office of Air Management (OAM) has reviewed an application from Cabinets by Graber, Inc. relating to the construction and operation of a wooden cabinet surface coating and composite countertop manufacturing operation.

**Permitted Emission Units and Pollution Control Equipment**

There are no permitted emission units operating at this source during this review process.

**Unpermitted Emission Units and Pollution Control Equipment**

The source consists of the following unpermitted facilities/units:

- (a) Two (2) paint booths, identified as P1 and P2, utilizing airless spray guns to coat a maximum of 2.79 wood units per hour, dry filters for particulate control, and exhausting to stacks P1 and P2;
- (b) one (1) countertop manufacturing operation, consisting of the following:
  - (1) six (6) forming tables for pouring resins;
  - (2) sanding and trimming area, utilizing an air purifier for particulate control.
- (c) Three (3) No. 1 distillate oil fueled heaters, identified as H1, H2, and H3, each rated at 0.125 million British thermal units (MMBtu) per hour, each exhausting at one (1) stack, identified as H1, H2, and H3, respectively;
- (d) One (1) No. 1 distillate oil fueled dryer, identified as D4, rated at 0.165 million British thermal units (MMBtu) per hour, exhausting at one (1) stack, identified as D4; and
- (e) Miscellaneous saws/sanders/wood trimming equipment, with a maximum capacity of 100 pounds per hour off wood, utilizing a baghouse and cyclone collection system for particulate control and exhausting to the interior of the building.



### Existing Approvals

There are no existing approvals for this source.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
P1&2	P1 2 Paint Booths	25.00	2.00	3,900 (est.)	Ambient
V1	V1 Process Vent	4.70	2.00	3,900 (est.)	Ambient
E1	E1 Diesel Generator	9.00	0.25	N/A	Ambient
H1	H1 Hot Air Heater	21.50	0.67	N/A	Ambient
H2	H2 Hot Air Heater	24.00	0.67	N/A	Ambient
H3	H3 Hot Air Heater	14.00	0.67	N/A	Ambient

### Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 14, 1999.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5.)

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	4.12
PM-10	4.12
SO <sub>2</sub>	1.20
VOC	28.64
CO	0.08
NO <sub>x</sub>	0.34

HAP's	Potential To Emit (tons/year)
Ethyl Benzene	0.18
Formaldehyde	0.04
Methanol	2.16
Methyl Isobutyl Ketone	1.01
Methyl Ethyl Ketone	1.01
Methyl Methacrylate	0.64
Styrene	2.38
Toluene	5.14
Xylenes	1.25
TOTAL	13.80

- (a) The potential to emit (as defined in 326 IAC 2-5.1-3) of VOC is equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.

#### Actual Emissions

No previous emission data has been received from the source.

#### County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all other regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.37
PM10	0.37
SO <sub>2</sub>	1.20
VOC	28.64
CO	0.08
NO <sub>x</sub>	0.34
Single HAP	5.14 (toluene)
Combination HAPs	13.80

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### Part 70 Permit Determination

##### 326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

#### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ) because potential single HAP and total HAP emissions are less than 10 and 25 tons per year, respectively.

#### State Rule Applicability - Entire Source

##### 326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), this source is not considered a major source because it has the potential to emit less than 250 tons per year of any criteria pollutant and it is not one of the 28 listed source categories. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

##### 326 IAC 2-6 (Emission Reporting)

This source is located in Allen County and the potential to emit all regulated pollutants are less than one-hundred (100) tons per year. The source is not one of the twenty-eight (28) listed sources and its potential to emit PM10 is less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

##### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

##### 326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This source was constructed prior to the applicability date of July 27, 1997, and potential single HAP and total HAP emissions are less than 10 and 25 tons per year, respectively, therefore, the source is not subject to the requirements of 326 IAC 2-1-3.4.

##### 326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the:

- (a) two (2) paint booths, identified as P1 and P2 shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the two (2) paint booths, identified as P1 and P2 are in operation, in order to comply with this limit.

- (b) Miscellaneous saws/sanders/wood trimming equipment shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10(0.05^{0.67}) = 0.55 \text{ lbs/hr} = 2.41 \text{ tons/yr}$$

The baghouse and cyclone shall be in operation at all times the miscellaneous saws/sanders/wood trimming equipment is in operation, in order to comply with this limit.

Based on this calculation, the controlled potential PM emissions of 0.03 lbs/hr are less than the allowable emissions of 0.55 lbs/hr. Therefore, woodworking facility complies with the rule.

##### 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

Facilities existing as of January 1, 1980 and that have potential VOC emissions of 25 tons per year or more and are not subject to any other 8 rules shall reduce VOC emissions using Best Available Control Technology (BACT). The two (2) paint booths are subject to the requirements of 326 IAC 8-2-12, therefore this rule does not apply. The one (1) composite countertop operation is not subject to the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because the one (1) composite countertop operation has potential to emit of VOC of less than 25 tons per year.

**326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)**

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

The source uses the Airless Spray Application method in the paint spray booths, therefore the source is in compliance with this requirement.

**Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Appendix A, pages 3 of 5)

**Conclusion**

The construction and operation of this wooden cabinet surface coating and composite countertop manufacturing operation shall be subject to the conditions of the attached proposed **New Source Construction and Minor Source Operating Permit 003-11152-00304.**

## Appendix A: Emission Calculations

**Company Name:** Cabinets by Graber, Inc.  
**Address City IN Zip:** 15202 Grabill Road, Grabill, IN 46741  
**CP:** 003-11152  
**Plt ID:** 003-00304  
**Reviewer:** PR/EVP  
**Date:** July 14, 1999

Uncontrolled Potential Emissions (tons/year)					
Emissions Generating Activity					
Pollutant	Distillate Oil Combustion	Woodworking Operations	Composite Countertops	Surface Coating	TOTAL
PM	0.03	0.14	0.00	3.95	4.12
PM10	0.03	0.14	0.00	3.95	4.12
SO2	1.20	0.00	0.00	0.00	1.20
NOx	0.34	0.00	0.00	0.00	0.34
VOC	0.01	0.00	3.02	25.61	28.64
CO	0.08	0.00	0.00	0.00	0.08
total HAPs	0.00	0.00	(styrene) 2.38	(toluene) 5.14	(toluene) 5.14
worst case single HAP	0.00	0.00	3.02	10.78	13.80
Total emissions based on rated capacity at 8,760 hours/year.					
Controlled Potential Emissions (tons/year)					
Emissions Generating Activity					
Pollutant	Distillate Oil Combustion	Woodworking Operations	Composite Countertops	Surface Coating	TOTAL
PM	0.03	0.14	0.00	0.20	0.37
PM10	0.03	0.14	0.00	0.20	0.37
SO2	1.20	0.00	0.00	0.00	1.20
NOx	0.34	0.00	0.00	0.00	0.34
VOC	0.01	0.00	3.02	25.61	28.64
CO	0.08	0.00	0.00	0.00	0.08
total HAPs	0.00	0.00	(styrene) 2.38	(toluene) 5.14	(toluene) 5.14
worst case single HAP	0.00	0.00	3.02	10.78	13.80
Total emissions based on rated capacity at 8,760 hours/year, after control.					

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

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**Company Name:** Cabinets by Graber, Inc.  
**Address City IN Zip:** 15202 Grabill Road, Grabill, IN 46741  
**CP:** 003-11152  
**Plt ID:** 003-00304  
**Reviewer:** PR/EVP  
**Date:** July 14, 1999

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
<b>PB1/PB2</b>																
6501 Sealer	7.60	68.13%	0.0%	68.1%	0.0%	23.49%	0.13000	2.561	5.18	5.18	1.72	41.37	7.55	1.77	22.04	50%
6530 Topcoat	7.91	60.16%	0.0%	60.2%	0.0%	31.30%	0.10000	2.642	4.76	4.76	1.26	30.18	5.51	1.82	15.20	50%
1048 Catalyst	8.98	42.43%	0.0%	42.4%	0.0%	42.34%	0.01000	1.880	3.81	3.81	0.07	1.72	0.31	0.21	9.00	50%
16-8469 Stain	6.69	88.13%	0.0%	88.1%	0.0%	8.89%	0.03000	2.790	5.90	5.90	0.49	11.84	2.16	0.15	66.32	50%
PS125 Thinner	6.98	100.00%	0.0%	100.0%	0.0%	0.00%	0.13000	2.535	6.98	6.98	2.30	55.20	10.07	0.00	ERR	50%

5.85      140.31      25.61      3.95

**State Potential Emissions**      **Add worst case coating to all solvents**

Limit Usage:	Limit Usage:	Control Efficiency:		Limit Usage:	Limit Usage:	Limit Usage:	Controlled
PM	VOC	VOC	PM	VOC lbs per Hour	VOC lbs per Day	VOC tons per Year	PM tons/yr
0.00%	0.00%	0.00%	95.00%	<b>5.85</b>	<b>140.31</b>	<b>25.61</b>	<b>0.20</b>

**Countertops**

Resin	9.17	1.41%	0.0%	1.4%	0.0%	63.00%	8.02000	0.665	0.13	0.13	0.69	16.54	3.02	0.00	0.21	100%
Catalyst	9.75	0.00%	0.0%	0.0%	0.0%	0.00%	0.18000	0.550	0.00	0.00	0.00	0.00	0.00	0.00	ERR	100%

**State Potential Emissions**      **Add worst case coating to all solvents**

0.69      16.54      3.02      0.00

Limit Usage:	Limit Usage:	Control Efficiency:		Limit Usage:	Limit Usage:	Limit Usage:	Controlled
PM	VOC	VOC	PM	VOC lbs per Hour	VOC lbs per Day	VOC tons per Year	PM tons/yr
0.00%	0.00%	0.00%	95.00%	<b>0.69</b>	<b>16.54</b>	<b>3.02</b>	<b>0.00</b>

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)  
Total = Worst Coating + Sum of all solvents used  
Composite countertop operation Weight % Volatile includes a 3% flash off factor for VOC.

# HAP Emission Calculations

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**CP:** 003-11152  
**Plt ID:** 003-00304  
**Reviewer:** PR/EVP  
**Date:** July 14, 1999

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % MEK	Weight % MIBK	Weight % Methanol	Weight % Styrene	Weight % Methyl Methacrylate	Weight % Formaldehyde	Weight % Ethyl Benzene
<b>PB1/PB2</b>												
6501 Sealer	7.60	0.13000	2.561	3.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.24%	0.00%
6530 Topcoat	7.91	0.10000	2.642	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.16%	2.00%
1048 Catalyst	8.98	0.01000	1.880	0.00%	0.00%	0.00%	0.00%	19.00%	0.00%	0.00%	0.00%	0.00%
16-8469 Stain	6.69	0.03000	2.790	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PS125 Thinner	6.98	0.13000	2.535	0.00%	40.00%	10.00%	10.00%	20.00%	0.00%	0.00%	0.00%	0.00%
<b>Countertops</b>												
Resin	9.17	8.02000	0.665	0.00%	0.00%	0.00%	0.00%	0.00%	1.11%	0.30%	0.00%	0.00%
Catalyst	9.8	0.18000	0.550	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Material	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	MEK Emissions (ton/yr)	MIBK Emissions (ton/yr)	Methanol Emissions (ton/yr)	Styrene Emissions (ton/yr)	Methyl Methacrylate Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)
<b>PB1/PB2</b>									
6501 Sealer	0.33	1.11	0.00	0.00	0.00	0.00	0.00	0.03	0.00
6530 Topcoat	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18
1048 Catalyst	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00
16-8469 Stain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PS125 Thinner	0.00	4.03	1.01	1.01	2.01	0.00	0.00	0.00	0.00

Total State Potential Emissions

**1.25      5.14      1.01      1.01      2.16      0.00      0.00      0.04      0.18**  
10.78

Material	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	MEK Emissions (ton/yr)	MIK Emissions (ton/yr)	Methanol Emissions (ton/yr)	Styrene Emissions (ton/yr)	Methyl Methacrylate Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)
<b>Countertops</b>									
Resin	0.00	0.00	0.00	0.00	0.00	2.38	0.64	0.00	0.00
Catalyst	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total State Potential Emissions

**0.00      0.00      0.00      0.00      0.00      2.38      0.64      0.00      0.00**  
3.02

## METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs



**Appendix A: Process Particulate Emissions**

**Company Name:** Cabinets by Graber, Inc.  
**Address City IN Zip:** 15202 Grabill Road, Grabill, IN 46741  
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**Pit ID:** 003-00304  
**Reviewer:** PR/EVP  
**Date:** July 14, 1999

<b>State Potential Emissions (tons/year)</b>						
<b>A. Baghouses</b>						
Process	No. of Units	Maximum Capacity (lbs/hr)	Estimated PM Emissions (lbs/hr)	Potential Emissions (tons/yr)	Control Efficiency	Total Controlled (tons/yr)
Misc. Woodworking Operations	1	100.00000	6.25	27	99.50%	0.14
Total Emissions Based on Rated Capacity at 8,760 Hours/Year						<b>0.14</b>

Methodology:

Potential Emissions = Estimated PM Emissions (lbs/hr) \* 8760 hours/yr \* 1ton/2000lbs

Total Emissions = Potential PM Emissions (lbs/hr) \* (1-Control Efficiency)

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#1 and #2 Fuel Oil**

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**Company Name:** Cabinets by Graber, Inc.  
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Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.5
0.5	33.7885714	

Heat Input Capacity includes:  
H1, H2 and H3, with a rated heat input of 0.125 mmBtu each, (0.375 mmBtu total)  
D4, with a rated heat input of 0.165 mmBtu

Emission Factor in lb/kgal	Pollutant				
	PM*	SO2	NOx	VOC	CO
	2.0	71 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	0.03	1.20	0.34	0.01	0.08

**Methodology**

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM B

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).